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(54) Title: MOISTURE-RESISTANT NANO-PARTICLE MATERIAL AND ITS APPLICATIONS

(57) Abstract: Nano-particle materials including nanometer-scaled particles with a variety of sizes, chemical compositions, and properties may be used to form functional and/or protective media (layers) on a variety of materials and items. Among the items that may be coated and/or protected by nano-particle materials are integrated circuits, printed circuit boards, micro-electro-mechanical systems (MEMS), photonics devices and packages, optical fibers, and displays, as well as various macroscopic structures, such as pipes (tubes), bridges, towers and other civil engineering structures, all kinds of marine vehicles and off-shore structures, aircraft and aerospace structures, cars, etc.



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